

## AMENDMENTS TO THE CLAIMS:

Claims 1-66 are canceled without prejudice or disclaimer.

Claims 1-66 (Cancelled)

Claim 67. (Original) A modified phytase comprising a mutation in an amino acid sequence of a phytase, wherein the modified phytase has phytase activity and the mutation is at one or more positions selected from the group consisting of:

24; 27; 31; 33; 39; 40; 41; 42; 46; 49; 56; 59; 68; 69; 70; 71; 72; 73; 74; 75; 76; 77; 78; 81; 82; 84; 116; 117; 119; 120; 121; 122; 123; 124; 125; 127; 128; 132; 149; 150; 151; 152; 155; 156; 157; 158; 159; 160; 161; 162; 163; 170f; 170g; 171; 184; 185; 187; 190; 191; 192; 193; 194; 200; 201; 201a; 201b; 201c; 201d; 201f; 202; 223; 228; 232; 233; 235; 236; 237; 239; 243; 246; 253; 256; 271; 272; 274; 275; 276; 277; 279; 280; 283; 285; 287; 288; 292; 293; 304; 332; 333; 334; 335; 336; 338; 341; 342; 343; 348; 349; 362; 364; 367; 368; 369; 370; 371; 372; 374; 375; 376; 387; 393; 394; 396; 409; 412; 413; 421; and 431,

wherein each position corresponds to the position of the amino acid sequence of the mature *P. lycii* phytase (SEQ ID NO: 7).

Claim 68. (Original) The modified phytase of claim 67, wherein the mutation is selected from the group consisting of:

24C; 27P; 31Y; 33C; 39H,S,Q; 40L,N; 42S,G; 49P; 56P; 58D,K,A; 59G; 69Q; 75W,F; 78D,S; 81A,G,Q,E; 82T; 84I,Y,Q,V; 116S; 119E; 120L; 122A; 123N,Q,T; 125M,S; 127Q,E,N; 128A,S,T; 132F,I,L; 151A,S; 152G; 157V; 158D,A; 159T; 160A,S; 161T,N; 162N; 163W; 170fH; 170gA; 171N; 184Q,S,P; 185S; 187A; 190A,P; 193S; 194S,T; 200G,V; 201D,E; 201a(); 201b(); 201c(); 201d(); 201f(); 202S,A; 223H,D; 228N; 232T; 233E; 235Y,L,T; 236Y,N; 237F; 246V; 253P; 256D; 271D,N; 275F,Y; 280A,P; 283P; 287A,T; 288L,I,F; 292F,Y; 293A,V; 304P,A; 332F; 336S; 338I; 343A,S,F,I,L; 348Y; 349P; 362P; 364W,F; 367A,K; 368K; 369I,L; 370V; 374S,A; 375H; 376M; 387P; 393V; 396R; 409R; 412R; 421F,Y; and 431E.

Claim 69. (Original) The modified phytase of claim 67, wherein the phytase is an ascomycete phytase.

Claim 70. (Original) The modified phytase of claim 69, wherein the phytase is an *Aspergillus* phytase.

Claim 71. (Original) The modified phytase of claim 70, wherein the phytase is an *Aspergillus ficuum*, *Aspergillus fumigatus*, *Aspergillus nidulans*, *Aspergillus niger*, or *Aspergillus terreus* phytase.

Claim 72. (Original) The modified phytase of claim 71, wherein the phytase is an *Aspergillus terreus*, CBS 116.46 phytase.

Claim 73. (Original) The modified phytase of claim 67, wherein the phytase is a *Myceliophthora thermophila*, *Talaromyces thermophilus*, or *Thermomyces lanuginosus* phytase.

Claim 74. (Original) The modified phytase of claim 73, wherein the phytase is a *Myceliophthora thermophila*, ATCC 34625 or ATCC 74340 phytase.

Claim 75. (Original) The modified phytase of claim 73, wherein the phytase is a *Talaromyces thermophilus*, ATCC 20186 or ATCC 74338 phytase.

Claim 76. (Original) The modified phytase of claim 73, wherein the phytase is a *Thermomyces lanuginosus*, NRRL B-21527 phytase.

Claim 77. (Original) The modified phytase of claim 67, wherein the phytase is an ascomycete consensus phytase sequence.

Claim 78. (Original) The modified phytase of claim 67, wherein the phytase is a basidiomycete phytase.

Claim 79. (Original) The modified phytase of claim 78, wherein the phytase is a *Agrocybe pediades*, *Paxillus involutus*, *Peniophora lycii*, or *Trametes pubescens* phytase.

Claim 80. (Original) The modified phytase of claim 79, wherein the phytase is a *Paxillus involutus*, CBS 100231 phytase.

Claim 81. (Original) The modified phytase of claim 80, wherein the phytase is a *Paxillus involutus*, CBS 100231 Phy-A2 phytase.

Claim 82. (Original) The modified phytase of claim 79, wherein the phytase is a *Trametes pubescens*, CBS 100232 phytase.

Claim 83. (Original) A feed or food comprising a modified phytase of claim 67.

Claim 84. (Original) A composition comprising a modified phytase of claim 67.

Claim 85. (Original) A process for reducing phytate levels in animal manure comprising feeding an animal with an effective amount of the feed of claim 83.